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EXAMINER
LAMBRECHT, CHRISTOPHER M

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/754,650	DEL SESTO ET AL.
	Examiner	Art Unit	
	Christopher M. Lambrecht	2623	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _03 May 2006_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-28_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-28_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed May 3, 2006 have been fully considered but they are

not persuasive. The amendments to the claims fail to patentably distinguish over the

prior art of record.

Applicant argues on page 11 of the reply that "Zdepski does not discuss

replacing interactive content with a second interactive content based on the interactive

content code and the option field" and "[a]dding the teachings of Hite doesn't cure the

defects of Zdepski."

As set forth in the rejections that follow, Zdepski is not relied upon to teach

replacing a first interactive content with second interactive content based on the option

field of the interactive code. Rather, Hite teaches these features. In particular, Hite

discloses replacing first interactive content with second interactive content (i.e.,

interactive targeted advertisements). Further, Hite teaches that embedded data

accompanying said first interactive content instruct an insertion processor to replace the

first content with second content based on the value of the embedded instructions (e.g.,

priority).

Accordingly, the examiner submits that the claims are obvious and thus

unpatentable over the prior art of record, as detailed in the following rejections.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2..   Claims 1-5, 7-14, 17, 19-22, 24, 27, and 28 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Zdepski (of record) in view of Hite (of record).

Regarding claim 1, Zdepski discloses a system for providing interactive content

(fig. 1, col. 3, ll. 49-51) comprising:

hardware (trigger extraction unit 56, fig. 1) adapted to receive one or more first

video streams (combined signal, fig. 1) that include video data and an interactive

content code (trigger, col. 4, ll. 7-10), wherein the hardware is further to produce a

second video stream (television signal at output of element 56, fig. 1);

an interactive content code detector (trigger extraction unit 56) adapted to detect

an interactive content code (interactive program ID, col. 4, ll. 51-58) identified in the

interactive content code (col. 4, ll. 51-58), and to produce (providing to interactive

program source 58) a control signal (the extracted trigger) responsive to detecting

(extracting) the interactive content code (trigger) (col. 4, ll. 19-24); and

a data insertion unit (interactive program source 58, data input unit 66, and AVI

transmission unit 68) adapted to receive (from 56, col. 4, ll. 21-22) the control signal

(extracted trigger) and to insert (providing to AVI transmission unit 68 for combining with

television signal, col. 4, ll. 28-38) interactive content (interactive program) into the

second video stream (television signal) responsive to (in accordance with, col. 4, ll. 29-30) information (fields 82, 84, and 86 of trigger, fig. 2) contained in the control signal (extracted trigger), resulting in a third video stream (AVI signal, fig. 1).

Zdepski fails to disclose that the first video stream comprises first interactive content which is replaced with second interactive content based on the value of an option field included in the interactive content code. However, in an analogous art, Hite discloses a video stream comprising first interactive content (i.e., an enhanced commercial (col. 3, ll. 60-62) supporting interactivity (col. 3, ll. 17-29)) which is replaced with second interactive content (col. 4, ll. 29-32) based on the value of an option field (e.g., priority, col. 2, ll. 28-32) included in an interactive content code (instructions transmitted in VBI of television signal, col. 4, ll. 10-21), thereby enabling targeted advertising (col. 2, ll. 39-44) and thus more efficient marketing (col. 2, ll. 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski to include first interactive content in the first video stream which is replaced with second interactive content based on the value of an option field included in the interactive content code, as taught by Hite, for the benefit of providing more effective television marketing.

As to claim 2, Zdepski and Hite together disclose the system of claim 1. In addition, Zdepski discloses the data insertion unit (58, 66, and 68) is positioned to insert interactive content into the second video stream (television signal) prior to the third video stream (AVI signal) being transmitted to a transmission source (satellite uplink 62), causing the second interactive content to remain in the third video stream upon

transmission (i.e., interactive content is inserted into the video stream at 68, and is then

transmitted to satellite uplink 62, with no intervening equipment in signal path between

AVI transmission unit 68 and satellite uplink 62, see fig. 1).

As to claim 3, Zdepski and Hite together disclose the system of claim 1. In

addition, Zdepski discloses a video stream generator (television signal source 12)

generates the first video stream (television signal), and the interactive content detector

(56) is coupled (via demodulator 54, satellite links 52 and 20, modulator 18, and trigger

insertion unit 16) to an output of the video stream generator.

As to claim 4, Zdepski and Hite together disclose the system of claim 1, wherein

the encrypted interactive content code is received in a different stream (vertical blanking

interval, Zdepski, col. 5, ll. 1-5) from a stream used to carry the video data (where VBI

data constitutes a different stream from video data transmitted in the active lines of an

NTSC signal).

As to claim 5, Zdepski and Hite together disclose the system of claim 1. In

addition, Zdepski discloses the interactive content code detector (56) and the data

insertion unit (58, 66, and 68) are coupled to a same point (broadcast station 50) in the

transmission path (i.e., path from source 12 to end users).

As to claim 7, Zdepski and Hite together disclose the system of claim 1, wherein

the encrypted interactive content code is located in a vertical blanking interval of the first

video stream (Zdepski, col. 5, ll. 1-5), and wherein the interactive content code detector

(56) includes a vertical blanking interval line reader (col. 5, ll. 24-26).

Regarding claim 8, Zdepski discloses a method for providing interactive content
(col. 3, ll. 49-51) in a broadcast facility (50, fig. 1) that transmits a video broadcast
stream (AVI signal) containing video along a transmission path for delivery to end users
(col. 4, ll. 34-38) and contains equipment (A-V compression unit 64) that may corrupt
interactive content (according to page 6, ll. 3-6 of the specification of the instant
application, such equipment includes video compression hardware), the method
comprising: inserting (by trigger insertion unit 16) an interactive content code (trigger,
col. 4, ll. 51-58) into a first video broadcast stream (television signal, col. 4, ll. 7-10),
resulting in a second video stream (combined television-trigger signal, fig. 1) with
embedded interactivity (i.e., embedded interactive content trigger), wherein the
interactive content code specifies an interactive content to accompany a video
broadcast (col. 4, ll. 47-51);

processing the second video stream (combined signal), to produce a third video
stream (television signal at output of 56, fig. 1); and

inserting an interactive content corresponding to (associated with, col. 4, ll. 47-
50) the interactive content code (trigger) into the third video stream to produce a fourth
video stream, which includes the interactive content (combining the interactive program
content with the compressed audio/video content, col. 4, ll. 33-38) and the interactive
content code (module ID, see col. 4, ll. 58-67 and col. 7, ll. 37-40 of U.S. Patent No.
5,448,568 to Delpuch et al., incorporated by reference in Zdepski, col. 6, ll. 45-49).

Zdepski fails to disclose encrypting the interactive content code and that the first
video stream comprises first interactive content which is replaced with second

interactive content based on the value of an option field included in the interactive

content code. However, in an analogous art, Hite discloses a encrypting interactive

content codes (encrypts commercial targeting instructions, col. 7, ll. 42-65 and col. 4, ll.

57-67) to reduce viewers' abilities to ignore commercial messages and a video stream

comprising first interactive content (i.e., an enhanced commercial (col. 3, ll. 60-62)

supporting interactivity (col. 3, ll. 17-29)) which is replaced with second interactive

content (col. 4, ll. 29-32) based on the value of an option field (e.g., priority, col. 2, ll. 28-

32) included in an interactive content code (instructions transmitted in VBI of television

signal, col. 4, ll. 10-21), thereby enabling targeted advertising (col. 2, ll. 39-44) and thus

more efficient marketing (col. 2, ll. 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the system of Zdepski to encrypt the interactive

content codes and include first interactive content in the first video stream which is

replaced with second interactive content based on the value of an option field included

in the interactive content code, as taught by Hite, for the benefit of providing more

effective television marketing.

As to claim 9, Zdepski and Hite together disclose the method of claim 8 (see

above). In addition, Zdepski discloses inserting an interactive content further comprises

inserting an interactive content corresponding to the interactive content code (col. 4, ll.

47-51) at a point in the transmission path after a last point in the transmission path

where the interactive content may be corrupted (see fig. 1, the interactive content is

inserted into the video stream at AVI transmission unit 68, after (i.e., to the right of) A-V

compression unit 64, where A-V compression unit 64 is the last point in the transmission path where the interactive content may be corrupted).

As to claim 10, Zdepski and Hite together disclose the method of claim 8. In addition, Zdepski discloses reading the interactive content code at a point in the transmission path prior to an interactive content in the second video stream being corrupted (see fig. 1, the interactive content code is read by trigger extraction unit 56, which is at a point in the transmission path prior to (i.e., to the left of) A-V compression unit 64, and hence the reading of the interactive content code occurs prior to the interactive content being corrupted, i.e., at A-V compression unit 64).

As to claim 11, Zdepski and Hite together disclose the method of claim 8. In addition, Zdepski discloses the embedded interactive content code (trigger) is inserted into a region (i.e., the vertical blanking interval, col. 5, ll. 1-5) of the second video stream that is preserved by the broadcast facility (where trigger extraction unit 56 extracts information in the VBI for use prior to potentially corrupting equipment such as compression unit 56, hence the VBI is a region that is preserved by the broadcasting facility).

As to claim 12, Zdepski and Hite together disclose the method of claim 8. In addition, Zdepski discloses reading the interactive content code (col. 4, ll. 19-27), wherein the interactive content is inserted (at 68) into the third video stream at a same point (broadcast station 50) in the transmission path (i.e., path from source 12 to end users) at which the interactive content code is read (at 56).

As to claim 13, Zdepski and Hite together disclose the method of claim 12. In addition, Zdepski discloses reading the interactive content code (col. 4, ll. 19-27), wherein the interactive content code is read at a point (at 56) in the transmission path after (i.e., to the right of) which broadcast facility equipment (A-V compression unit 64) that may corrupt an interactive content is coupled to the transmission path.

As to claim 28, Zdepski and Hite together disclose the method of claim 8, wherein encrypting the interactive content code comprises disarranging elements of the interactive content code to produce a scrambled interactive content code (see Hite, col. 7, ll. 42-47).

Regarding claim 14, Zdepski discloses a method for providing interactive content (col. 3, ll. 49-51) in a broadcast facility (50, fig. 1) that transmits a video broadcast stream (AVI signal) containing video for delivery along a transmission path for delivery to end users (col. 4, ll. 34-38) and contains equipment (A-V compression unit 64) that may corrupt interactive content (according to page 6, ll. 3-6 of the specification of the instant application, such equipment includes video compression hardware), comprising:

inserting (by trigger insertion unit 16) an interactive content code (trigger, col. 4, ll. 51-58) into a first video stream (television signal, col. 4, ll. 7-10), resulting in a second video stream (combined signal) with embedded interactivity (col. 4, ll. 6-10), wherein the interactive content code specifies an interactive content to accompany a video broadcast (col. 4, ll. 47-51), and wherein the interactive content code is inserted into a region (i.e., the vertical blanking interval, col. 5, ll. 1-5) of the second video stream that is preserved by the broadcast facility (where trigger extraction unit 56 extracts

information in the VBI for use prior to potentially corrupting equipment such as

compression unit 56, hence the VBI is a region that is preserved by the broadcasting

facility);

processing (compressing) the second video stream to produce a third video

stream (col. 4, ll. 28-38); and

inserting an interactive content corresponding to (associated with, col. 4, ll. 47-

50) the interactive content codes into the third video stream (combining the interactive

program content with the compressed audio/video content, col. 4, ll. 33-38) at a point in

the transmission path after a point in the transmission path where broadcast facility

equipment that may corrupt the interactive content is coupled to the transmission path

(see fig. 1, the interactive content is inserted into the video stream at AVI transmission

unit 68, after (i.e., to the right of) A-V compression unit 64, where A-V compression unit

64 is the last point in the transmission path where the interactive content may be

corrupted), to produce a fourth video stream (AVI signal, fig. 1).

Zdepski fails to disclose encrypting the interactive content code in a manner to

prevent ad skipping and that the first video stream comprises first interactive content

which is replaced with second interactive content based on the value of an option field

included in the interactive content code. However, in an analogous art, Hite discloses an

interactive content code source (addressable instruction formatter 226 of ad facility 200,

figs. 2a, b) for generating interactive content codes (commercial targeting instructions,

col. 7, ll. 48-65) encrypted in a manner to prevent ad skipping (encrypts commercial

targeting instructions, col. 7, ll. 42-65 and col. 4, ll. 57-67), reducing viewers' abilities to

ignore commercial messages, and a video stream comprising first interactive content

(i.e., an enhanced commercial (col. 3, II. 60-62) supporting interactivity (col. 3, II. 17-29))

which is replaced with second interactive content (col. 4, II. 29-32) based on the value of

an option field (e.g., priority, col. 2, II. 28-32) included in an interactive content code

(instructions transmitted in VBI of television signal, col. 4, II. 10-21), thereby enabling

targeted advertising (col. 2, II. 39-44) and thus more efficient marketing (col. 2, II. 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the system of Zdepski to encrypt said interactive

content codes in a manner to prevent ad skipping and include first interactive content in

the first video stream which is replaced with second interactive content based on the

value of an option field included in the interactive content code, as taught by Hite, for

the benefit of providing more effective television marketing.

Regarding claim 17, Zdepski discloses a method for providing interactive content

(col. 3, II. 49-51) in a broadcast facility (50, fig. 1) that transmits a video stream (AVI

signal) containing video for delivery along a transmission path to end users (col. 4, II.

34-38), the method comprising:

inserting a reference (trigger, col. 4, II. 51-58) to an interactive content into a

region (i.e., the vertical blanking interval, col. 5, II. 1-5) of a first video stream (television

signal), wherein the region is preserved by the broadcast facility (where trigger

extraction unit 56 extracts information in the VBI for use prior to potentially corrupting

equipment such as compression unit 56, hence the VBI is a region that is preserved by

the broadcasting facility), resulting in a second video stream (combined signal) with

embedded interactivity (col. 4, ll. 6-10);

processing (A/V compressing) the second video stream, to produce a third video

stream (col. 4, ll. 28-38);

inserting an interactive content corresponding to the reference (combining the

interactive program content with the compressed audio/video content, col. 4, ll. 33-38)

into the third video stream (), to produce a fourth video stream (AVI signal, fig. 1).

Zdepski fails to disclose encrypting the interactive content code in a manner to

prevent ad skipping and that the first video stream comprises first interactive content

which is replaced with second interactive content based on the value of an option field

included in the interactive content code. However, in an analogous art, Hite discloses an

interactive content code source (addressable instruction formatter 226 of ad facility 200,

figs. 2a, b) for generating interactive content codes (commercial targeting instructions,

col. 7, ll. 48-65) encrypted in a manner to prevent ad skipping (encrypts commercial

targeting instructions, col. 7, ll. 42-65 and col. 4, ll. 57-67), reducing viewers' abilities to

ignore commercial messages, and a video stream comprising first interactive content

(i.e., an enhanced commercial (col. 3, ll. 60-62) supporting interactivity (col. 3, ll. 17-29))

which is replaced with second interactive content (col. 4, ll. 29-32) based on the value of

an option field (e.g., priority, col. 2, ll. 28-32) included in an interactive content code

(instructions transmitted in VBI of television signal, col. 4, ll. 10-21), thereby enabling

targeted advertising (col. 2, ll. 39-44) and thus more efficient marketing (col. 2, ll. 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the system of Zdepski to encrypt said interactive

content codes in a manner to prevent ad skipping and include first interactive content in

the first video stream which is replaced with second interactive content based on the

value of an option field included in the interactive content code, as taught by Hite, for

the benefit of providing more effective television marketing.

Regarding claim 19, Zdepski discloses a system for providing interactive content

(fig. 1, col. 3, ll. 49-51) comprising:

hardware (trigger extraction unit 56, fig. 1) adapted to receive a first video stream

(combined trigger-television signal, fig. 1) that includes video data and one or more

interactive content codes (col. 4, ll. 6-10), and to produce a second video stream

(television signal at output of 56, fig. 1)

an interactive content code detector (trigger extraction unit 56), coupled to the

first video stream (combined signal from demodulator 54), adapted to detect one or

more interactive content codes (trigger, col. 4, ll. 51-58) and to produce (providing to

interactive program source 58) a control signal (the extracted trigger) responsive to

detecting (extracting) an interactive content code (trigger) (col. 4, ll. 19-24); and

a data insertion unit (interactive program source 58, data input unit 66, and AVI

transmission unit 68), coupled to the interactive content code detector (56), adapted to

receive (from 56, col. 4, ll. 21-22) the control signal (extracted trigger) and to insert

(providing to AVI transmission unit 68 for combining with television signal, col. 4, ll. 28-

38) interactive content (interactive program) into the second video stream (television

signal) responsive to (in accordance with, col. 4, ll. 29-30) information (fields 82, 84, and

86 of trigger, fig. 2) contained in the control signal (extracted trigger), resulting in a third

video stream (AVI signal, fig. 1) to be transmitted to one or more local subsystems (i.e.,

broadcasting equipment, fig. 1), wherein the data insertion unit (58, 66, and 68) is

positioned to insert interactive content into the second video stream prior (i.e., no

intervening equipment in signal path between AVI transmission unit 68 and satellite

uplink 62, see fig. 1) to the third video stream (AVI signal) being transmitted to a

transmission source (satellite uplink 62) causing the interactive content to remain in the

third video stream upon transmission.

Zdepski fails to disclose encrypting the interactive content code in a manner to

prevent ad skipping and that the first video stream comprises first interactive content

which is replaced with second interactive content based on the value of an option field

included in the interactive content code. However, in an analogous art, Hite discloses an

interactive content code source (addressable instruction formatter 226 of ad facility 200,

figs. 2a, b) for generating interactive content codes (commercial targeting instructions,

col. 7, ll. 48-65) encrypted in a manner to prevent ad skipping (encrypts commercial

targeting instructions, col. 7, ll. 42-65 and col. 4, ll. 57-67), reducing viewers' abilities to

ignore commercial messages, and a video stream comprising first interactive content

(i.e., an enhanced commercial (col. 3, ll. 60-62) supporting interactivity (col. 3, ll. 17-29))

which is replaced with second interactive content (col. 4, ll. 29-32) based on the value of

an option field (e.g., priority, col. 2, ll. 28-32) included in an interactive content code

(instructions transmitted in VBI of television signal, col. 4, II. 10-21), thereby enabling

targeted advertising (col. 2, II. 39-44) and thus more efficient marketing (col. 2, II. 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the system of Zdepski to encrypt said interactive

content codes in a manner to prevent ad skipping and include first interactive content in

the first video stream which is replaced with second interactive content based on the

value of an option field included in the interactive content code, as taught by Hite, for

the benefit of providing more effective television marketing.

Regarding claim 20, Zdepski discloses a system for providing interactive content

(fig. 1, col. 3, II. 49-51) comprising:

local equipment (trigger extraction unit 56, fig. 1), adapted to receive one or more

first signals (combined television-trigger signal, fig. 1) from a broadcast facility (remote

network 10, fig. 1), wherein the one or more first signals include video data and one or

more interactive content codes (col. 4, II. 6-10), and to produce a first video stream

(television signal at output of 56, fig. 1);

an interactive content detection unit (trigger extraction unit 56) adapted to detect

(col. 4, II. 19-21, where extracting inherently involves detecting) an interactive content

code (trigger, col. 4, II. 51-58) and to transmit (providing to interactive program source

58) a control signal (the extracted trigger) responsive to detecting (extracting) the

interactive content code (trigger) (col. 4, II. 19-24); and

a data insertion unit (interactive program source 58, data input unit 66, and AVI

transmission unit 68), coupled to the interactive content code detector (56), adapted to

receive (from 56, col. 4, ll. 21-22) the control signal (extracted trigger) and to insert

(providing to AVI transmission unit 68 for combining with television signal, col. 4, ll. 28-

38) interactive content (interactive program) into the first video stream (television signal)

responsive to information (fields 82, 84, and 86 of trigger, fig. 2) contained in the control

signal (extracted trigger), resulting in a second video stream (AVI signal, fig. 1).

Zdepski fails to disclose encrypting the interactive content code in a manner to

prevent ad skipping and that the first video stream comprises first interactive content

which is replaced with second interactive content based on the value of an option field

included in the interactive content code. However, in an analogous art, Hite discloses an

interactive content code source (addressable instruction formatter 226 of ad facility 200,

figs. 2a, b) for generating interactive content codes (commercial targeting instructions,

col. 7, ll. 48-65) encrypted in a manner to prevent ad skipping (encrypts commercial

targeting instructions, col. 7, ll. 42-65 and col. 4, ll. 57-67), reducing viewers' abilities to

ignore commercial messages, and a video stream comprising first interactive content

(i.e., an enhanced commercial (col. 3, ll. 60-62) supporting interactivity (col. 3, ll. 17-29))

which is replaced with second interactive content (col. 4, ll. 29-32) based on the value of

an option field (e.g., priority, col. 2, ll. 28-32) included in an interactive content code

(instructions transmitted in VBI of television signal, col. 4, ll. 10-21), thereby enabling

targeted advertising (col. 2, ll. 39-44) and thus more efficient marketing (col. 2, ll. 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the system of Zdepski to encrypt said interactive

content codes in a manner to prevent ad skipping and include first interactive content in

the first video stream which is replaced with second interactive content based on the

value of an option field included in the interactive content code, as taught by Hite, for

the benefit of providing more effective television marketing.

As to claim 21, Zdepski and Hite together disclose the system of claim 20. In

addition, Zdepski discloses the data insertion unit (58, 66, and 68) is positioned to insert

interactive content into the first video stream prior (i.e., no intervening equipment in

signal path between AVI transmission unit 68 and satellite uplink 62, see fig. 1) to the

second video stream (AVI signal) being transmitted to customer premise equipment

(end users, via satellite uplink 62, col. 4, ll. 36-38) causing the interactive content to

remain in the second video stream upon transmission.

As to claim 22, Zdepski and Hite together disclose the system of claim 20. In

addition, Zdepski discloses the interactive content code detector (56) and the data

insertion unit (58, 66, and 68) are coupled to a same point (broadcast station 50) in the

transmission path (i.e., source 12 to end users).

As to claim 24, Zdepski and Hite together disclose the system of claim 20. In

addition, Zdepski discloses the interactive content code detector (56) is a vertical

blanking interval reader (col. 5, ll. 24-26).

Regarding claim 27, Zdepski discloses a method of increasing a reliability for

delivery of interactive content (col. 3, ll. 49-51), the method comprising the steps of:

inserting an interactive content code (trigger, col. 4, ll. 51-58) into a first

component (vertical blanking interval, col. 5, ll. 1-5) of a first signal alternate to a second

component, which is used to convey interactive content (interactive program information

packets of AVI signal, col. 6, II. 22-25);

processing (compressing) the first signal (television signal) to produce a second

signal (compressed television signal, col. 4, II. 28-38);

detecting (col. 4, II. 19-21, where extracting inherently involves detecting) an

interactive content code (trigger) in the first signal (television signal); and

inserting interactive content corresponding to (associated with, col. 4, II. 47-50)

the interactive content code into the second signal (col. 6, II. 14-15) to produce a third

signal (AVI signal, fig. 1).

Zdepski fails to disclose encrypting the interactive content code in a manner to

prevent ad skipping and that the first video stream comprises first interactive content

which is replaced with second interactive content based on the value of an option field

included in the interactive content code. However, in an analogous art, Hite discloses an

interactive content code source (addressable instruction formatter 226 of ad facility 200,

figs. 2a, b) for generating interactive content codes (commercial targeting instructions,

col. 7, II. 48-65) encrypted in a manner to prevent ad skipping (encrypts commercial

targeting instructions, col. 7, II. 42-65 and col. 4, II. 57-67), reducing viewers' abilities to

ignore commercial messages, and a video stream comprising first interactive content

(i.e., an enhanced commercial (col. 3, II. 60-62) supporting interactivity (col. 3, II. 17-29))

which is replaced with second interactive content (col. 4, II. 29-32) based on the value of

an option field (e.g., priority, col. 2, II. 28-32) included in an interactive content code

(instructions transmitted in VBI of television signal, col. 4, II. 10-21), thereby enabling

targeted advertising (col. 2, II. 39-44) and thus more efficient marketing (col. 2, II. 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the system of Zdepski to encrypt said interactive

content codes in a manner to prevent ad skipping and include first interactive content in

the first video stream which is replaced with second interactive content based on the

value of an option field included in the interactive content code, as taught by Hite, for

the benefit of providing more effective television marketing.

3.   Claims 6, 15, 18, and 23 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Zdepski and Hite in view of Blackketter (of record).

Regarding claim 6, Zdepski and Hite together disclose the system of claim 5.

Zdepski and Hite fail to disclose the interactive content corresponds to a universal

resource locator. However, in an analogous art, Blackketter discloses inserting

interactive content corresponding to a uniform resource locator (uniform resource

identifier, col. 8, II. 5-15 and col. 1, II. 18-26), for the purpose of enabling the retrieval of

Internet content such that the viewing experience may be enhanced (col. 8, II. 5-15 and

col. 1, II. 26-30). Therefore, it would have been obvious to one of ordinary skill in the art

at the time the invention was made to modify the system of Zdepski and Hite to include

disclose the interactive content corresponds to a universal resource locator, as taught

by Blackketter, for the purpose of enabling the retrieval of Internet content such that the

viewing experience may be enhanced in a system for providing interactive television

content.

Regarding claim 15, Zdepski and Hite together disclose the method of claim 14, but fail to disclose inserting a plurality of interactive content codes in different regions of the second video signal. However, in an analogous art, Blackketter discloses inserting a plurality of interactive codes (first trigger and second trigger) inserted into different regions of data (i.e., a first region of data corresponding to a first time, and a second region of data corresponding to a second time, during which the first and second triggers are transmitted, respectively), for the purpose of improving reliability by sending redundant triggers (col. 7, l. 60 – col. 8, l. 15). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski and Hite to include inserting a plurality of interactive content codes in different regions of the video broadcast signal, as taught by Blackketter, for the purpose of improving reliability by sending redundant triggers in a method for providing interactive television content.

Regarding claim 18, Zdepski and Hite together disclose the method of claim 17. In addition, Zdepski discloses inserting the reference (trigger) in a region (vertical blanking interval, col. 5, ll. 1-5) of the video stream that is preserved by the broadcast facility (where trigger extraction unit 56 extracts information in the VBI for use prior to potentially corrupting equipment such as compression unit 56, hence the VBI is a region that is preserved by the broadcasting facility). Zdepski and Hite fail to disclose the reference (trigger) is a uniform resource locator. However, in an analogous art, Blackketter discloses the reference (trigger) is a uniform resource locator (uniform resource identifier, col. 8, ll. 5-15 and col. 1, ll. 18-26), for the purpose of enabling the

retrieval of Internet content such that the viewing experience may be enhanced (col. 8, ll. 5-15 and col. 1, ll. 26-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski and Hite to include the reference is a universal resource locator, as taught by Blackketter, for the purpose of enabling the retrieval of Internet content such that the viewing experience may be enhanced in a system for providing interactive television content.

Regarding claim 23, Zdepski and Hite together disclose the system of claim 20. In addition, Zdepski discloses the data insertion unit inserts an interactive content (interactive program) corresponding to the interactive content code (trigger) (col. 4, ll. 47-50). Zdepski and Hite fail to disclose the interactive content code comprises a universal resource locator. However, in an analogous art, Blackketter discloses the reference (trigger) is a uniform resource locator (uniform resource identifier, col. 8, ll. 5-15 and col. 1, ll. 18-26), for the purpose of enabling the retrieval of Internet content such that the viewing experience may be enhanced (col. 8, ll. 5-15 and col. 1, ll. 26-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski and Hite to include the reference is a universal resource locator, as taught by Blackketter, for the purpose of enabling the retrieval of Internet content such that the viewing experience may be enhanced in a system for providing interactive television content.

4.   Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zdepski,

Hite, and Blackketter as applied to claim 15 above, and further in view of Ciciora (of

record).

Regarding claim 16, Zdepski, Hite, and Blackketter together disclose the method

of claim 15, but fail to explicitly disclose at least one of the different regions is preserved

by at least one local subsystem. However, in an analogous art, Ciciora discloses the

use of SCTE standards for preserving closed captioning data fields for carriage of data

embedded in the VBI to the set-top terminal (i.e., the transmission having interfaced

with at least one local subsystem), for the purpose of satisfying FCC regulations (pg.

101, §3.3.5). Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to modify the system of Zdepski, Hite, and Blackketter

to include at least one of the regions is preserved by at least one local subsystem, as

taught by Ciciora, for the purpose of satisfying FCC regulations in a method for

providing interactive television content.

5.   Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zdepski

in view of Hite in view of Blackketter and further in view of Ciciora (of record).

Regarding claim 25, Zdepski discloses a method of ensuring reliable delivery of

interactive content (col. 3, ll. 49-51) comprising:

inserting an interactive content code (trigger, col. 4, ll. 51-58) in the vertical

blanking interval (col. 5, ll. 1-5) of a video stream (col. 4, ll. 7-10) to be broadcast to a

plurality of local subsystems (such as satellites, local headends, distribution nodes, etc,

encountered prior to the video stream being delivered to end users, col. 4, ll. 34-37),

wherein the interactive content code corresponds to an interactive content to be

inserted into the video stream (col. 4, ll. 47-50).

Zdepski fails to disclose encrypting the interactive content code in a manner to

prevent ad skipping; that the first video stream comprises first interactive content which

is replaced with second interactive content based on the value of an option field

included in the interactive content code; a plurality of interactive content codes inserted

into different regions of data; and each region of data is preserved by at least one local

subsystem. However, in an analogous art, Hite discloses an interactive content code

source (addressable instruction formatter 226 of ad facility 200, figs. 2a, b) for

generating interactive content codes (commercial targeting instructions, col. 7, ll. 48-65)

encrypted in a manner to prevent ad skipping (encrypts commercial targeting

instructions, col. 7, ll. 42-65 and col. 4, ll. 57-67), reducing viewers' abilities to ignore

commercial messages, and a video stream comprising first interactive content (i.e., an

enhanced commercial (col. 3, ll. 60-62) supporting interactivity (col. 3, ll. 17-29)) which

is replaced with second interactive content (col. 4, ll. 29-32) based on the value of an

option field (e.g., priority, col. 2, ll. 28-32) included in an interactive content code

(instructions transmitted in VBI of television signal, col. 4, ll. 10-21), thereby enabling

targeted advertising (col. 2, ll. 39-44) and thus more efficient marketing (col. 2, ll. 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the system of Zdepski to encrypt said interactive

content codes in a manner to prevent ad skipping and include first interactive content in

the first video stream which is replaced with second interactive content based on the value of an option field included in the interactive content code, as taught by Hite, for the benefit of providing more effective television marketing.

Zdepski and Hite fail to disclose a plurality of interactive content codes inserted into different regions of data and that each region of data is preserved by at least one local subsystem. However, in an analogous art, Blackketter discloses a plurality of interactive codes (first trigger and second trigger) inserted into different regions of data (i.e., a first region of data corresponding to a first time, and a second region of data corresponding to a second time, during which the first and second triggers are transmitted, respectively), for the purpose of improving reliability by sending redundant triggers (col. 7, l. 60 – col. 8, l. 15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski and Hite to include a plurality of interactive content codes inserted into different regions of data, as taught by Blackketter, for the purpose of improving reliability by sending redundant triggers.

Zdepski, Hite, and Blackketter fail to disclose each region of data is preserved by at least one local subsystem. However, in an analogous art, Ciciora discloses the use of SCTE standards for preserving closed captioning data fields for carriage of data embedded in the VBI to the set-top terminal (i.e., the transmission having interfaced with at least one local subsystem), for the purpose of satisfying FCC regulations (pg. 101, §3.3.5).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the system of Zdepski, Hite, and Blackketter to

include each region of data is preserved by at least one local subsystem, as taught by

Ciciora, for the purpose of satisfying FCC regulations in a method of ensuring reliable

delivery of interactive content.

6.   Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zdepski

in view Hite in view of Kaiser (of record) and further in view of Ciciora.

Regarding claim 26, Zdepski discloses a method of ensuring reliable delivery of

interactive content (col. 3, ll. 49-51) comprising: inserting an interactive content code

(trigger, col. 4, ll. 51-58) into a vertical blanking region of a video stream (col. 5, ll. 1-5),

wherein the interactive content code corresponds to an interactive content to be

inserted into the video stream (col. 4, ll. 47-50). Zdepski additionally discloses the use of

interactive television content for marketing purposes (col. 1, ll. 15-22).

Zdepski fails to disclose encrypting the interactive content code in a manner to

prevent ad skipping; that the first video stream comprises first interactive content which

is replaced with second interactive content based on the value of an option field

included in the interactive content code; inserting the code in a closed caption region;

and the closed caption region is preserved by at least one local subsystem. However, in

an analogous art, Hite discloses an interactive content code source (addressable

instruction formatter 226 of ad facility 200, figs. 2a, b) for generating interactive content

codes (commercial targeting instructions, col. 7, ll. 48-65) encrypted in a manner to

prevent ad skipping (encrypts commercial targeting instructions, col. 7, ll. 42-65 and col. 4, ll. 57-67), reducing viewers' abilities to ignore commercial messages, and a video stream comprising first interactive content (i.e., an enhanced commercial (col. 3, ll. 60-62) supporting interactivity (col. 3, ll. 17-29)) which is replaced with second interactive content (col. 4, ll. 29-32) based on the value of an option field (e.g., priority, col. 2, ll. 28-32) included in an interactive content code (instructions transmitted in VBI of television signal, col. 4, ll. 10-21), thereby enabling targeted advertising (col. 2, ll. 39-44) and thus more efficient marketing (col. 2, ll. 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zdepski to encrypt said interactive content codes in a manner to prevent ad skipping and include first interactive content in the first video stream which is replaced with second interactive content based on the value of an option field included in the interactive content code, as taught by Hite, for the benefit of providing more effective television marketing.

Zdepski and Hite fail to disclose the interactive content code is inserted in a closed caption region, and the closed caption region is preserved by at least one local subsystem. However, in an analogous art, Kaiser discloses an interactive content code (trigger) inserted in a closed caption region (VBI line 21, col. 6, ll. 65-67), for the purpose of enabling the insertion of triggers using conventional closed-captioning equipment (col. 7, ll. 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system Zdepski and Hite to include the

interactive content code is inserted in a closed caption region, as taught by Kaiser, for

the purpose of enabling the insertion of triggers using conventional closed-captioning

equipment.

Zdepski, Hite, and Kaiser fail to explicitly disclose the closed caption region is

preserved by at least one local subsystem. However, in an analogous art, Ciciora

discloses the use of SCTE standards for preserving closed captioning data fields for

carriage of data embedded in the VBI to the set-top terminal (i.e., the transmission

having interfaced with at least one local subsystem), for the purpose of satisfying FCC

regulations (pg. 101, §3.3.5).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the system Zdepski, Hite, and Kaiser to include

the closed caption region is preserved by at least one local subsystem, as taught by

Ciciora, for the purpose of satisfying FCC regulations in a method for ensuring reliable

delivery of interactive content.

Conclusion

7.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8.   The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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        Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Lambrecht whose telephone number is (571) 272-7297. The examiner can normally be reached on Mon-Fri, 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher M. Lambrecht
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